REMARKS REGARDING THE SECTION 102 REJECTION

Claims 1 to 3 were rejected under 35 U.S.C. § 102(b) as being anticipated by the Deuchler et al. article in the *Journal of Dairy Science* entitled "Milk Choline Secretion As An Indirect Indicator Of Postruminal Choline Supply."

Before addressing the rejection, a very brief review of the Applicant's invention may be helpful. Choline compounds benefit ruminant animals such as cattle if they reach the abomasum. It is widely known that adding choline to the food of a ruminant is not effective because the choline is broken down in the rumen. It is also widely known that the choline can be protected from degradation in the rumen by encapsulation. The terms "encapsulated" and "rumen protected" are commonly used synonymously in the art. See, for example, Miller, U.S. Patent No. 6,106,871, issued Aug. 22, 2000, at col. 2, lines 49 to 65. Miller is incorporated by reference in the instant application.

The Applicant discovered that the expensive encapsulation process can be avoided by dissolving a choline compound in the drinking water of the ruminant. The Applicant's method enables a high percentage of the choline to pass through the rumen without degradation and reach the abomasum.

The Deuchler et al. article describes an experiment in which choline was dissolved in water and then injected through a plastic tube directly into the abomasum of a dairy cow. Thus, the cow did not *drink* the choline solution and the choline solution was not exposed to the rumen. The amount of choline in the subsequently secreted milk was then measured. It was confirmed that the amount of choline in the milk correlated with the amount of choline injected into the abomasum.

Because of the correlation, Deuchler et al. teach that their method is useful in determining the effectiveness of various techniques for encapsulating choline. In other words, the test can be used to determine how well the encapsulation protects the choline from degradation in the choline.

Anticipation requires the presence in a single prior art reference of each and every element of the claimed invention arranged as in the claim. The Deuchler et al. article does not disclose the *drinking* of a choline solution by a ruminant animal. Instead, the choline solution is injected directly into the abomasum using plastic tubing. Accordingly, the Applicant believes the amended claims are not anticipated by the Deuchler et al. article.

REMARKS REGARDING THE SECTION 103 REJECTION

Claims 4 to 5 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Deuchler et al. in view of the Ontario Ministry of Agriculture, Food and Rural Affairs Factsheet entitled "Water Requirements Of Livestock" by R.W. Irwin.

As discussed above, Deuchler et al. do not teach or suggest the possibility of a ruminant animal *drinking* a non-encapsulated choline solution. In fact, Deuchler et al. teach away from the Applicant's invention because they teach that there are only two ways to obtain the beneficial effects of choline: (1) encapsulate it so it is protected against degradation in the rumen; or (2) inject it directly into the abomasum. The Irwin article concerns drinking water, but does not mention choline. Nothing in either reference teaches or suggests dissolving a choline compound in the drinking water as an effective means of avoiding degradation in the rumen.

In view of the amendments and the above remarks, allowance of claims 1 to 6 is requested.

Respectfully submitted,

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CERTIFICATE OF MAILING

Philip L. Bateman certifies that this paper is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on May 18, 2007.

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